

Attorney Docket No. 990589RE/LH

**IN THE UNITED STATES PATENT
AND TRADEMARK OFFICE**

Applicant(s) : Yoshihiro SHIMADA

Reissue appln.
for USP : 6,255,646

Issued : July 3, 2001

Express Mail Mailing Label

No.: EV 339 431 821 US

Date of Deposit: July 2, 2003

I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

Ian T. Volek
Ian T. Volek

PRELIMINARY AMENDMENT

Mail Stop Reissue
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S I R :

Please preliminarily amend the above-identified application
by adding new claims 7-10 as follows:

7. (New) A scanning optical microscope which scans a sample with a laser beam from a laser source, said scanning optical microscope comprising:

a spectral resolving unit which resolves spectra of
5 fluorescent rays from the sample;

a wavelength splitter which splits the fluorescent rays resolved by the spectral resolving unit into rays of a plurality of different wavelengths; and

10 a plurality of side-on type photomultipliers, respectively provided in optical paths of the rays of different wavelengths split by the wavelength splitter, for sensing the rays,

wherein axial centers of the plurality of side-on type photomultipliers come approximately within planes to be spectrally-resolved by the spectral resolving unit.

8. (New) The scanning optical microscope according to claim 7, further comprising:

a plurality of image forming optical systems, respectively provided at fronts of the plurality of side-on type
5 photomultipliers in each of the optical paths of the rays of different wavelengths split by the wavelength splitter, for forming images of the rays; and

a plurality of confocal apertures respectively provided at focal points of said plurality of image forming optical systems.

9. (New) The scanning optical microscope of claim 8,
wherein said spectral resolving unit comprises an optical unit
which emits a resolved bundle of rays in parallel.

10. (New) The scanning optical microscope according to
claim 7, further comprising:

a beam splitter for splitting the fluorescent rays from the
sample and the laser beam; and

a reducing optical system, provided between the beam
splitter and said spectral resolving unit, for reducing the
bundle of rays.